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Field: Title/Abstract, Limits: Publication Date to 2002

- Search History will be lost after eight hours of inactivity.
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Search	Most Recent Queries	Time	Result
<u>#19</u>	Search leuconostoc dehydrogenase Field: Title/Abstract, Limits: Publication Date to 2002	09:44:09	<u>92</u>
#16	Search leuconostoc oxidoreductase Field: Title/Abstract, Limits: Publication Date to 2002	09:38:38	3
#15	Search leuconostoc reductase Field: Title/Abstract, Limits: Publication Date to 2002	09:38:28	2
<u>#13</u>	Search leuconostoc mesenteroides reductase Field: Title/Abstract, Limits: Publication Date to 2002	09:34:13	2
<u>#12</u>	Search leuconostoc mesenteroides Field: Title/Abstract, Limits: Publication Date to 2002	09:34:07	<u>465</u>
#2	Search leuconostoc mesenteroides	09:33:59	<u>575</u>
<u>#3</u>	Search leuconostoc mesenteroides dextranicum	09:32:34	<u>21</u>
<u>#1</u>	Search leuconostoc	09:30:24	<u>1459</u>

Clear History

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NCBI | NLM | NIH

Department of Health & Human Services

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Feb 6 2006 04:30:54

DeMoss, R. Triphosphopyridine nucleotide-specific ethanol dehydrogenase from Leuconostoc mesenteroides. Bacteriol. Proc. (1953) 81. 3

Database : A\_Geneseq\_21:\*
 1: geneseqp1980s:\*
 2: geneseqp1990s:\*
 3: geneseqp2000s:\*
 4: geneseqp2001s:\*
 5: geneseqp2002s:\*
 6: geneseqp2003as:\*
 7: geneseqp2003bs:\*
 8: geneseqp2004s:\*
 9: geneseqp2005s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	% Query Match	Length	DВ	ID	Description
1	1605	100.0	317	8	ADH01242	Adh01242 Alpha-ket
2	595	37.1	319	7	ADC96588	Adc96588 E. faeciu
3	593.5	37.0	312	9	ADV16664	Adv16664 E. faeciu
4	593.5	37.0	326	7	ADC95776	Adc95776 E. faeciu
5	575.5	35.9	312	5	ABB54660	Abb54660 Lactococc
6	559	34.8	345	7	ADH86803	Adh86803 Enterococ
7	558.5	34.8	301	8	ADM93781	Adm93781 Enterococ
8	551.5	34.4	302	9	ADV16488	Adv16488 E. faecal

```
RESULT 1
ADH01242
ID
     ADH01242 standard; protein; 317 AA.
XX
AC
    ADH01242;
XX
DT
     15-APR-2004 (first entry)
XX
DE
    Alpha-keto acid reductase protein, SEQ ID No 2.
XX
KW
     alpha-keto acid reductase; (R)-alpha-hydroxy acid;
    beta-nicotinamide adenine dinucleotide; 2-chlorophenyl glyoxylic acid;
KW
KW
     (R)-2-chloromandelic acid; alpha-hydroxy acid; mandelic acid;
KW
     anti-platelet agent; anti-obesity; pesticide.
XX
os
     Leuconostoc mesenteroides.
XX
PN
     EP1382674-A2.
XX
PD
     21-JAN-2004.
XX
PF
     16-JUL-2003; 2003EP-00016163.
XX
PR
     16-JUL-2002; 2002JP-00207507.
XX
PA
     (DAIL ) DAICEL CHEM IND LTD.
XX
PΙ
     Kimoto N, Yamamoto H;
XX
DR
     WPI; 2004-111491/12.
DR
    N-PSDB; ADH01241.
XX
PT
     Novel alpha-keto acid reductase which reduces alpha-keto acid to produce
PT
     alpha-hydroxy acid using reduced beta-nicotinamide adenine dinucleotide
PT
     as a coenzyme, useful for producing optically active alpha-hydroxy acid.
XX
PS
     Claim 6; SEQ ID NO 2; 48pp; English.
XX
CC
     The invention relates to a novel alpha-keto acid reductase. The novel
CC
     alpha-keto acid reductase reduces alpha-keto acid to produce (R)-alpha-
CC
     hydroxy acid using reduced beta-nicotinamide adenine dinucleotide as the
CC
     coenzyme; and is able to utilise reduced beta-nicotinamide adenine
CC
     dinucleotide as a coenzyme in a reduction reaction, reducing 2-
CC
     chlorophenyl glyoxylic acid to produce (R) 2-chloromandelic acid. The
     alpha-keto acid reductase is useful for producing optically active alpha-
CC
CC
     hydroxy acid and mandelic acid. The optically active mandelic acid
CC
     derivatives obtained by a method of the invention are useful as
CC
     intermediates in synthesizing pharmaceutical, preferably anti-platelet
CC
     agents or anti-obesity drugs, and pesticides. This sequence represents
CC
     the alpha-keto acid reductase protein of the invention.
XX
SO
     Sequence 317 AA;
  Query Match
                          100.0%;
                                   Score 1605; DB 8; Length 317;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e-137;
  Matches 317; Conservative
                               0; Mismatches
                                                                 0; Gaps
                                                                              0;
                                                   0; Indels
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Qу
          1 MKIAIAGFGALGARLGVMLQAGGHEVTGIDGWPAHIAAINTKGLTVVKDNDAPQKYFVPV 60
            Db
          1 MKIAIAGFGALGARLGVMLQAGGHEVTGIDGWPAHIAAINTKGLTVVKDNDAPQKYFVPV 60
         61 MPASEVTGTFDLIILLTKTPQLDRMLTDIQPIITDTTKLLVLSNGLGNIEVMAKHVSRHQ 120
Qу
            61 MPASEVTGTFDLIILLTKTPQLDRMLTDIQPIITDTTKLLVLSNGLGNIEVMAKHVSRHQ 120
Db
        121 ILAGVTLWTSSLIKPGEIHVTGSGSIKLQAIGDADVQSIADALNQAGLNAEITPDVMTAI 180
Qy
            121 ILAGVTLWTSSLIKPGEIHVTGSGSIKLQAIGDADVQSIADALNQAGLNAEITPDVMTAI 180
Db
Qу
        181 WHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKQVGASQGIKVDVSGIMTD 240
            Db
        181 WHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKOVGASOGIKVDVSGIMTD 240
        241 LSOLLKPENAGNHFPSMYODIONGKRTEIDFLNGYFAKIGHESGIPTPFNALVTRLIHAK 300
Qу
            Db
        241 LSQLLKPENAGNHFPSMYQDIQNGKRTEIDFLNGYFAKIGHESGIPTPFNALVTRLIHAK 300
Qу
        301 EDIERVKLAKOOENFEI 317
            111111111111111111
Db
        301 EDIERVKLAKQQENFEI 317
RESULT 2
ADC96588
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    ADC96588 standard; protein; 319 AA.
XX
AC
    ADC96588;
XX
DΤ
    01-JAN-2004 (first entry)
XX
DE
    E. faecium protein sequence SEQ ID 6215.
XX
KW
    Vaccine; urinary tract infection; bacteraemia; endocarditis; wound;
KW
    abdominal-pelvic infection.
XX
os
    Enterococcus faecium.
XX
PN
    US6583275-B1.
XX
PD
    24-JUN-2003.
XX
PF
    30-JUN-1998;
                 98US-00107532.
XX
PR
    02-JUL-1997;
                 97US-0051571P.
PR
    14-MAY-1998;
                 98US-0085598P.
XX
PA
    (GENO-) GENOME THERAPEUTICS CORP.
XX
PΙ
    Doucette-Stamm LA, Bush D;
XX
DR
    WPI; 2003-799836/75.
DR
    N-PSDB; ADC92934.
XX
PT
    New isolated nucleic acid derived from Enterococcus faecium encoding an
```

Enterococcus faecium polypeptide useful for detection, prevention and PTtreatment of a pathological condition resulting from a bacterial РΤ infection. XX Example 1; SEQ ID NO 6215; 243pp; English. PS XX The invention relates to an isolated nucleic acid derived from CC CC Enterococcus faecium encoding an Enterococcus faecium polypeptide having CC one of 10 fully defined sequences given in the (or comprising 40 CC sequential nucleotides chosen from any of the nucleic acids, its CC complement or sequences hybridising to it). Also included are a CC recombinant vector comprising the nucleic acid operably linked to CC transcription regulatory element, a cell comprising the vector and a CC single-stranded probe comprising the nucleic acid. The nucleic acids are chosen from 3654 disclosed sequences encoding 3654 disclosed proteins. CC CC The nucleic acids is useful for diagnosing pathological conditions CC resulting from E. faecium bacterial infection (e.g. urinary tract CC infection, bacteraemia, endocarditis, wounds and abdominal-pelvic CC infection) and for screening drugs such as agonists and antagonists. The CC nucleic acid is useful for recombinant production of Candida albicans derived peptides or antisense polypeptides. Pharmaceutical compositions CC CC and vaccines containing the nucleic acid are useful for preventing or CC treating Enterococcus faecium infections. The present sequence represents one if the disclosed E. faecium proteins. CC XX SQ Sequence 319 AA; Query Match 37.1%; Score 595; DB 7; Length 319; Best Local Similarity 41.3%; Pred. No. 2.1e-45; Matches 128; Conservative 57; Mismatches 117; Indels 8; Gaps 1 MKIAIAGFGALGARLGVMLQAGGHEVTGIDGWPAHIAAINTKGLTVVKDNDAPQKYFVPV 60 Qу 7 MKIAIAGAGAMGSRIGLMLHOSGNEVLLIDRWPAHIEAIRTNGL-IADFNGKEVVAKLPI 65 Db 61 MPASEVTGT---FDLIILLTKTPQLDRMLTDIQPIITDTTKLLVLSNGLGNIEVMAKHVS 117 Qу 66 YSPEEIIESNEHVDLIVALTKANQLDDMFCSIQSIITDNTYVLCLLNGLGHEDVLEKYVP 125 Db Qу 118 RHQILAGVTLWTSSLIKPGEIHVTGSGSIKLQAI---GDADVQSIADALNQAGLNAEITP 174 : || |:|:||: | || ||:|: : || || ||:|: : : : Db 126 KKNILFGITMWTAGLAGPGKVTLLGDGEIELENLEPEGEAFTKKVVEVFQEANLNPIYSH 185 175 DVMTAIWHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKQVGASQGIKVDV 234 Qy Db 186 NVRYSIWRKACVNGTLNGLCTILDCNIAELGAQKAAESMVRTIVSEFASIAAKEGIILDQ 245 Qу 235 SGIMTDLSQLLKPENAGNHFPSMYQD-IQNGKRTEIDFLNGYFAKIGHESGIPTPFNALV 293 1:| | |:||||| |:| : |||| : | : | | | : Db 246 EEVYQHIASTYDPDNIGLHYPSMYQDLIKNHRLTEIDYINGAIWRKGQKYDIATPYCAFL 305

294 TRLIHAKEDI 303

1:1:1111

306 TQLVHAKEGI 315

Qy

Db

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		8				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	<b>595</b>	37.1	319	- <b></b> 2	US-09-107-532A-6215	Sequence 6215, Ap
2	593.5	37.0	326	2	US-09-107-532A-5403	Sequence 5403, Ap
3	559	34.8	345	2	US-09-134-000C-4688	Sequence 4688, Ap
4	474	29.5	279	- 2	US-09-134-000C-5430	Sequence 5430, Ap
5	461.5	28.8	313	2	US-09-710-279-2568	Sequence 2568, Ap
6	461.5	28.8	317	2	US-09-134-001C-3366	Sequence 3366, Ap
7	460	28.7	243	2	US-09-134-000C-3753	Sequence 3753, Ap
8	254.5	15.9	306	2	US-09-489-039A-13474	Sequence 13474, A
9	219.5	13.7	315	2	US-09-252-991A-24352	Sequence 24352, A
10	211.5	13.2	320	2	US-09-543-681A-6146	Sequence 6146, Ap
11	198	12.3	281	2	US-09-902-540-11701	Sequence 11701, A
12	174.5	10.9	358	2	US-09-248-796A-15976	Sequence 15976, A
13	173.5	10.8	319	2	US-09-252-991A-30187	Sequence 30187, A
14	170	10.6	359	2	US-09-538-092-111	Sequence 111, App
15	158.5	9.9	300	2	US-09-710-279-1420	Sequence 1420, Ap

Database: Published\_Applications\_AA\_Main:\*

1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*

2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*

3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep:\*

4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep:\*

5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*

6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		8				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	1605	100.0	317	4	US-10-619-779-2	Sequence 2, Appli
2	461.5	28.8	317	4	US-10-724-972A-4872	Sequence 4872, Ap
3	248	15.5	300	3	US-09-738-626-4711	Sequence 4711, Ap
4	243.5	15.2	323	4	US-10-156-761-9372	Sequence 9372, Ap
5	183	11.4	298	5	US-10-984-449-30	Sequence 30, Appl
6	158.5	9.9	317	4	US-10-724-972A-5107	Sequence 5107, Ap
7	155.5	9.7	72	4	US-10-424-599-249547	Sequence 249547,
8	127.5	7.9	514	4	US-10-282-122A-45523	Sequence 45523, A
9	123	7.7	318	4	US-10-156-761-13346	Sequence 13346, A
10	121.5	7.6	429	4	US-10-369-493-14884	Sequence 14884, A
11	121.5	7.6	430	4	US-10-369-493-11682	Sequence 11682, A
12	121.5	7.6	430	4	US-10-369-493-14339	Sequence 14339.

Database : PIR\_80:\*
 1: pir1:\*
 2: pir2:\*
 3: pir3:\*
 4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	% Query Match	Length	DB	ID	Description
1	724	45.1	305	2	AC0828	probable oxidoredu
2	575.5	35.9	312	2	C86790	2-dehydropantoate
3	497.5	31.0	311	2	D90046	hypothetical prote
4	349.5	21.8	307	2	D97261	ketopantoate reduc
5	340.5	21.2	301	2	H71011	probable thiamin b
6	317.5	19.8	300	2	н75119	probable 2-dehydro
7	314	19.6	310	2	A70449	hypothetical prote
8	311.5	19.4	294	2	F69461	thiamin biosynthes
9	268.5	16.7	296	2	D82092	2-dehydropantoate
10	263	16.4	303	2	D84230	hypothetical prote
11	255.5	15.9	303	2	AC0385	2-dehydropantoate
12	248.5	15.5	337	2	T31129	hypothetical prote
13	242.5	15.1	323	2	T35004	probable oxidoredu
14	239.5	14.9	303	2	G90688	hypothetical prote
15	239.5	14.9	303	2	C85539	hypothetical prote
16	235.5	14.7	303	2	A64772	ketopantoate reduc
17	233	14.5	301	2	A97098	ketopantoate reduc
18	226.5	14.1	303	2	E83096	ketopantoate reduc

Database : UniProt\_05.80:\*

1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		ક					
Result		Query					
No.	Score	Match	Length	DB	ID	Descrip	otion
1	726	45.2	305	2	Q5PIJ0_SALPA		salmonella
2	724	45.1	305	2	Q8Z4L0_SALTI	Q8z410	salmonella
3	723	45.0	305	2	Q8ZN23_SALTY	Q8zn23	salmonella
4	714	44.5	305	2	Q57LD8_SALCH	Q571d8	salmonella
5	613.5	38.2	308	2	Q8XMA4_CLOPE	Q8xma4	clostridium
6	603	37.6	313	2	Q831Q5_ENTFA	Q831q5	enterococcu
7	591.5	36.9	312	2	Q8KUBO_ENTFA	Q8kub0	enterococcu
8	575.5	35.9	312	1	PANE_LACLA	Q9cfy8	lactococcus
9	559	34.8	313	2	Q834J5_ENTFA	Q834j5	${\tt enterococcu}$
10	551	34.3	307	2	Q8DYX1_STRA5	Q8dyx1	streptococc
11	551	34.3	307	2	Q8E4I0_STRA3	Q8e4i0	streptococc
12	541	33.7	307	1	PANE_STRP3	P65667	streptococc
13	541	33.7	307	1	PANE_STRPY	P65666	streptococc
14	538	33.5	307	1	PANE_STRP6	Q5xcq0	streptococc
15	538	33.5	307	1	PANE_STRP8	Q8p1f1	streptococc
16	501.5	31.2	311	2	Q8NUZ2_STAAW	Q8nuz2	staphylococ
17	501.5	31.2	311	2	Q5HDB0_STAAC	Q5hdb0	staphylococ
18	497.5	31.0	311	2	Q7A3Q3_STAAN	Q7a3q3	staphylococ
19	497.5	31.0	311	2	Q99RI8_STAAM	Q99ri8	staphylococ
20	494.5	30.8	311	2	Q6G6M7_STAAS	Q6g6m7	staphylococ
21	492.5	30.7	311	2	Q6GDY9 STAAR	Q6gdy9	staphylococ
22	487.5	30.4	310	2	Q4L8V1_STAHJ	Q418v1	staphylococ
23	461.5	28.8	310	2	Q5HLG5_STAEQ	Q5hlg5	staphylococ
24	461.5	28.8	310	2	Q8CN57_STAEP	Q8cn57	staphylococ
25	448.5	27.9	307	2	Q4KB04_PSEF5	Q4kb04	pseudomonas
26	422	26.3	309	2	Q4PJB5_9BACT	Q4pjb5	uncultured
27	420	26.2	222	2	Q83Z94_ENTFA	Q83z94	enterococcu
28	411	25.6	310	2	Q63WP8_BURPS	Q63wp8	burkholderi
29	405	25.2	313	2	Q62MA2_BURMA	Q62ma2	burkholderi
30	400	24.9	314	2	Q4LLS8_9BURK	Q411s8	burkholderi
31	382	23.8	308	2	Q4JML1_9BACT	Q4jml1	uncultured
32	369	23.0	332	2	Q64D62_9ARCH	Q64d62	uncultured

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RESULT 2
O8Z4L0 SALTI
     Q8Z4L0 SALTI PRELIMINARY;
                                   PRT;
                                          305 AA.
ID
AC
     Q8Z4L0; Q7CBM3;
DT
     01-MAR-2002 (TrEMBLrel. 20, Created)
DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
     01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
DT
DE
     Putative oxidoreductase.
GN
     OrderedLocusNames=STY2819, t0284;
OS
     Salmonella typhi.
OC
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Salmonella.
OX
    NCBI TaxID=601;
RN
     [1]
RP
    NUCLEOTIDE SEQUENCE.
RC
     STRAIN=CT18;
    MEDLINE=21534947; PubMed=11677608; DOI=10.1038/35101607;
RX
     Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J.,
RA
     Churcher C.M., Mungall K.L., Bentley S.D., Holden M.T.G., Sebaihia M.,
RA
     Baker S., Basham D., Brooks K., Chillingworth T., Connerton P.,
RA
RA
     Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J.,
     Feltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K.,
RA
RA
     Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C.,
RA
     Quail M.A., Rutherford K.M., Simmonds M., Skelton J., Stevens K.,
RA
    Whitehead S., Barrell B.G.;
RT
     "Complete genome sequence of a multiple drug resistant Salmonella
RT
     enterica serovar Typhi CT18.";
RL
    Nature 413:848-852(2001).
RN
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RP
    NUCLEOTIDE SEQUENCE.
RC
    STRAIN=Ty2 / ATCC 700931;
    MEDLINE=22531367; PubMed=12644504;
RX
    DOI=10.1128/JB.185.7.2330-2337.2003;
RX
RA
    Deng W., Liou S.-R., Plunkett G. III, Mayhew G.F., Rose D.J.,
RA
     Burland V., Kodoyianni V., Schwartz D.C., Blattner F.R.;
RT
     "Comparative genomics of Salmonella enterica serovar Typhi strains Ty2
RT
     and CT18.";
RL
     J. Bacteriol. 185:2330-2337(2003).
    EMBL; AL627275; CAD02775.1; -; Genomic_DNA.
DR
    EMBL; AE016835; AA068009.1; -; Genomic_DNA.
DR
DR
    GO; GO:0008677; F:2-dehydropantoate 2-reductase activity; IEA.
DR
    GO; GO:0016491; F:oxidoreductase activity; IEA.
DR
    GO; GO:0015940; P:pantothenate biosynthesis; IEA.
DR
    GO; GO:0006206; P:pyrimidine base metabolism; IEA.
DR
    InterPro; IPR003710; ApbA.
    InterPro; IPR000205; NAD BS.
DR
DR
    Pfam; PF02558; ApbA; 1.
DR
    TIGRFAMs; TIGR00745; apbA panE; 1.
KW
    Complete proteome.
SQ
    SEQUENCE
               305 AA; 33123 MW; 67FD347DB3D1E58F CRC64;
 Query Match
                         45.1%; Score 724; DB 2; Length 305;
 Best Local Similarity
                         48.2%; Pred. No. 8.7e-45;
 Matches 147; Conservative
                               51; Mismatches 101; Indels
                                                                            3;
                                                                6; Gaps
Qу
           1 MKIAIAGFGALGARLGVMLQAGGHEVTGIDGWPAHIAAINTKGLTVVKDNDAPQKYF-VP 59
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Db	1	MKIAIAGAGAMGCRFGYMLLEAGHDVTLIDGWQEHVDAIRSKGLFVETETTQKYYPIP 58
Qу	60	VMPASEVTGTFDLIILLTKTPQLDRMLTDIQPIITDTTKLLVLSNGLGNIEVMAKHVSRH 11
Db	59	AMLADESQGEFELVILFTKAMQLDSMLQRIKPLLPAAKVVMILSNGLGNIETLEKYVDRQ 11
Qу	120	QILAGVTLWTSSLIKPGEIHVTGSGSIKLQAIGDADVQSIADALNQAGLNAEITPDV 17:
Db	119	KIYAGVTLWSSELEGAGHIMATGTGTIELQPIASQDSAQEAKVIATLNSAGLNAEISPDV 17
Qу	177	MTAIWHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKQVGASQGIKVDVSG 23::
Db	179	LLSIWKKAAFNSVMNTYCALLDCNVGGFGQRPGALDLAQAVVDEFVLVAASQNIPLTEQM 23
Qу	237	<pre>IMTDLSQLLKPENAGNHFPSMYQDIQNGKRTEIDFLNGYFAKIGHESGIPTPFNALVTRL 29 :  : ::   : :  :  :  :        :   ::          : : </pre>
Db	239	VMNTVKKVFDPRESGHHYPSMHQDLHKGRLTEIDYLNGAIARIGAQNNIAVPVNTLLTQL 29
Qу	297	IHAKE 301
Db	299	IHAKE 303

RESULT 3

```
RESULT 3
Q8ZN23 SALTY
    Q8ZN23 SALTY PRELIMINARY;
                                  PRT;
                                         305 AA.
AC
    Q8ZN23;
DT
    01-MAR-2002 (TrEMBLrel. 20, Created)
    01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT
    01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DΤ
DE
    Putative ketopantoate reductase (EC 1.1.1.169).
GN
    OrderedLocusNames=STM2573;
OS
    Salmonella typhimurium.
OC
    Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
    Enterobacteriaceae; Salmonella.
OX
    NCBI TaxID=602;
RN
    [1]
    NUCLEOTIDE SEQUENCE.
RP
RC
    STRAIN=LT2 / SGSC1412 / ATCC 700720;
RX
    MEDLINE=21534948; PubMed=11677609; DOI=10.1038/35101614;
RA
    McClelland M., Sanderson K.E., Spieth J., Clifton S.W., Latreille P.,
    Courtney L., Porwollik S., Ali J., Dante M., Du F., Hou S., Layman D.,
RA
    Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E.,
RA
RA
    Ryan E., Sun H., Florea L., Miller W., Stoneking T., Nhan M.,
RA
    Waterston R., Wilson R.K.;
RT
    "Complete genome sequence of Salmonella enterica serovar Typhimurium
RT
    LT2.";
RL
    Nature 413:852-856(2001).
DR
    EMBL; AE008817; AAL21467.1; -; Genomic DNA.
    GO; GO:0008677; F:2-dehydropantoate 2-reductase activity; IEA.
DR
DR
    GO; GO:0016491; F:oxidoreductase activity; IEA.
DR
    GO; GO:0015940; P:pantothenate biosynthesis; IEA.
DR
    GO; GO:0006206; P:pyrimidine base metabolism; IEA.
DR
    InterPro; IPR003710; ApbA.
DR
    InterPro; IPR000205; NAD BS.
DR
    Pfam; PF02558; ApbA; 1.
DR
    TIGRFAMs; TIGR00745; apbA panE; 1.
KW
    Complete proteome; Oxidoreductase.
    SEQUENCE 305 AA; 33150 MW; 67FD347DAB72E58F CRC64;
SO
                        45.0%; Score 723; DB 2; Length 305;
  Query Match
  Best Local Similarity
                        48.2%; Pred. No. 1e-44;
 Matches 147; Conservative 51; Mismatches 101; Indels
                                                              6; Gaps
Qу
           1 MKIAIAGFGALGARLGVMLQAGGHEVTGIDGWPAHIAAINTKGLTVVKDNDAPQKYF-VP 59
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Db
           1 MKIAIAGAGAMGCRFGYMLLEAGHDVTLIDGWQEHVDAIRSKGLFV--ETETTQKYYPIP 58
Qу
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              59 AMLADESQGEFELVILFTKAMQLDSMLQRIKPLLPAAKVVMILSNGLGNIETLEKYVDRQ 118
Db
         120 QILAGVTLWTSSLIKPGEIHVTGSGSIKLQAIGDAD---VQSIADALNQAGLNAEITPDV 176
Qу
                          - 1
                                                   :
                                                         1: ||||||||
Db
         119 KIYAGVTLWSSELEGAGHIMATGTGTIELQPIASQDSAQEAKVIATLNSAGLNAEISPDV 178
Qy
         177 MTAIWHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKOVGASOGIKVDVSG 236
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Db
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RESULT 1
US-09-107-532A-6215
; Sequence 6215, Application US/09107532A
; Patent No. 6583275
    GENERAL INFORMATION:
         APPLICANT: Lynn A Doucette-Stamm and David Bush
         TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
                             ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND
THERAPEUTICS
        NUMBER OF SEQUENCES: 7310
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: GENOME THERAPEUTICS CORPORATION
              STREET: 100 Beaver Street
              CITY: Waltham
              STATE: Massachusetts
              COUNTRY: USA
              ZIP: 02354
         COMPUTER READABLE FORM:
              MEDIUM TYPE: CD/ROM ISO9660
              COMPUTER: PC
              OPERATING SYSTEM: <Unknown>
              SOFTWARE: ASCII
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/107,532A
              FILING DATE: 30-Jun-1998
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: 60/085,598
              FILING DATE: 14 May 1998
              APPLICATION NUMBER: 60/051571
              FILING DATE: July 2, 1997
         ATTORNEY/AGENT INFORMATION:
              NAME: Ariniello, Pamela Deneke
              REGISTRATION NUMBER: 40,489
              REFERENCE/DOCKET NUMBER: GTC-012
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: (781)893-5007
              TELEFAX: (781)893-8277
    INFORMATION FOR SEQ ID NO: 6215:
         SEQUENCE CHARACTERISTICS:
              LENGTH: 319 amino acids
              TYPE: amino acid
;
              TOPOLOGY: linear
        MOLECULE TYPE: protein
        HYPOTHETICAL: YES
        ORIGINAL SOURCE:
              ORGANISM: Enterococcus faecium
         FEATURE:
              NAME/KEY: misc feature
              LOCATION: (B) LOCATION 1...319
         SEQUENCE DESCRIPTION: SEQ ID NO: 6215:
US-09-107-532A-6215
  Query Match
                          37.1%; Score 595; DB 2; Length 319;
  Best Local Similarity 41.3%; Pred. No. 7.5e-51;
 Matches 128; Conservative 57; Mismatches 117; Indels
                                                                 8; Gaps
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Qу

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Qу	118	RHQILAGVTLWTSSLIKPGEIHVTGSGSIKLQAIGDADVQSIADALNQAGLNAEITP :     : :      :::      : : : : : :	174
Db	126	KKNILFGITMWTAGLAGPGKVTLLGDGEIELENLEPEGEAFTKKVVEVFQEANLNPIYSH	185
Qу	175	DVMTAIWHKAGINAVLNPLSVLLNANIAEFGTAGNAMDLALNILDEMKQVGASQGIKVDV:   :	234
Db	186	NVRYSIWRKACVNGTLNGLCTILDCNIAELGAQKAAESMVRTIVSEFASIAAKEGIILDQ	245
Qy	235	SGIMTDLSQLLKPENAGNHFPSMYQD-IQNGKRTEIDFLNGYFAKIGHESGIPTPFNALV	293
Db	246	: ::  :     :       :  :     ::   :   :     :	305
Qу	294	TRLIHAKEDI 303	
Db	306	: :      TQLVHAKEGI 315	